



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/697,663	10/25/2000	Daniel R. Cassiday	SUN1P413/5329	4650

7590 08/06/2004

B. NOEL KIVILIN  
MEERTONS, HOOD, KIVLIN, KOWERT & GOETZEL  
P.O. BOX 398  
AUSTION, TX 78767-0398

EXAMINER

WONG, BLANCHE

ART UNIT	PAPER NUMBER
----------	--------------

2667

DATE MAILED: 08/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/697,663

Applicant(s)

CASSIDY ET AL.

Examiner

Blanche Wong

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-7 and 16-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3,5-7 and 23-32 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 16-22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date #7/Apr 30, 2004.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Examiner suggests an update of the status of the related application in the section Cross-Reference to Related Applications.

### ***Drawings***

2. The drawings are objected to because Fig. 2 requires clarification.

Examiner suggests labeling the different buffers S,A,D,M,F,X (214,216,218,220,222,232 respectively), and removing abbreviations not obvious to a person of ordinary skill in the art, such as FO-A and FO-B, but obviously important to the invention, in order to increase legibility.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of

any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. The disclosure is objected to because of the following informalities: typographical error: On p. 4, ln. 5, "alternatate" should be "alternate"; misplaced numbers: On p. 11, ln. 13, "16" is extraneous or needs to be spelled out to differentiate from numbers of figures.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claims 16-22** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claim 16, ln. 6-7, it is unclear "a failure in a link connected to the node will not disrupt the flow of a data packet scheduled to use the link." Where there is a failure in a link, there would have been disruption of the flow of a data packet. It is unclear whether there is a detection of the failure before the data packet is sent and how the detection is done.

***Allowable Subject Matter***

6. **Claims 1-3,5-7,23-32** are allowed.

7. The following is a statement of reasons for the indication of allowable subject matter:

With regard to claim 23, the prior art of record fails to anticipate or make obvious "storing the data packet in a failover buffer when received at the first node and before routing the data packet to a failover storage area; routing the data packet to a failover storage area."

With regard to claims 24-28, the prior art of record fails to anticipate or make obvious "routing the data packet to a failover storage area further comprises routing the data packet to a first data stack or a second data stack."

With regard to claim 29, the prior art of record fails to anticipate or make obvious "routing the data packet to a failover storage area" before "sharing only the alternative link at the first node in order to transmit the data packet to the second node."

With regard to claim 30, the prior art of record fails to anticipate or make obvious "routing the data packet to a failover storage area" before "determining whether the second node is in failover mode after the second node receives the data packet from the first node on the alternative link."

With regard to claim 31, the prior art of record fails to anticipate or make obvious "converting the data packet to a failover data packet at the first node by marking the data packet as a failover packet and recomputing a CRC value; routing the data packet to a failover storage area."

With regard to claim 32, the prior art of record fails to anticipate or make obvious  
“a system comprising: a first node ... and a second node ... ”

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Brewer et al. (U.S. Pat No. 6,188,668), and Baldwin et al. (U.S. Pat No. 6,201,787) and (U.S. Pat No. 6,101,166) disclose an automatic bypass of a failure.

Baldwin et al. (U.S. Pat No. 6,101,166) and (U.S. Pat No. 6,201,787) discloses an automatic loop segment failure isolation.

Drott et al. (U.S. Pat No. 6,343,067) discloses CRC computing, col. 5, ln. 14.

Nakata (U.S. Pat No. 6,452,934) discloses a packet forwarding apparatus where upon disconnection notification signal, data stop transmitting and stay in the buffer.

Singhal et al. (U.S. Pat No. 6,658,478) discloses a data storage system between two nodes where the storage is a shared resource.

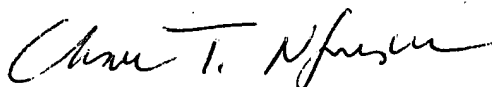
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is 703-305-8963. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H Pham can be reached on 703-305-4378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Ru*

BW  
July 13, 2004



CHAU NGUYEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600